



*Technology Partnerships 2002*

**TPWG, Morgantown, June 12, 2002**

*Advanced Technology Program  
– A Valuable Tool for the  
Development of High-Risk  
Technologies*

Robert Fireovid  
robert.b-f@nist.gov  
301-975-5457



## *Most Involved Federal Labs*

### Incidents in Active or Completed Projects

Organization	As Sub	As JV	Total
DoD labs	10	1	11
Oak Ridge	11	0	11
Lawrence Livermore	8	0	8
Sandia	5	2	7
NASA labs	4	2	6
Argonne	5	1	6
Los Alamos	5	0	5
Other DoE labs	4	0	4

# *Federal Lab Participation*

- **Subcontractors** (directly participate)
- **Joint Venture partners** (directly participate)
  - <10% of cases (direct participation)
- **For-profit spinoffs** (indirectly participate)
  - Either as single-company awardee or Joint Venture member
  - Almost \$15 million in ATP funds have gone to 6 awards involving spinoffs from DoE labs

## Projects with *For-Profit* *Spinoffs* from National Labs

Company	'Parent' Lab	Technology
Hyseq	Argonne	DNA sequencing
Trinity Flywheel	L. Livermore	magnetic bearings
PowerStor	L. Livermore	ultra-capacitors
PolyPlus	L. Berkeley	Li-metal batteries
Excellatron	Oak Ridge	thin-film batteries
Intematix	L. Berkeley	dielectrics

## *How Federal Labs Add Value*

- **Offer access to existing technical know-how, facilities, etc.**
  - **Represents majority of cases**
  - **Pay-for-service contract research or consulting agreements**
- **Develop new, innovative technology core to the project's overall objective**
  - **Over \$17 million in ATP funds went to 2 such projects**
  - **Long-term licensing agreements**

## *Projects where **National Labs** Provide the **Core Technology***

- **“Printed Wiring Board Interconnect Systems” – Sandia**
  - Large collaboration; \$12,866 K from ATP
  - Several different tasks subcontracted to Sandia; attracted additional \$5.2 million from DoE
  - Plasma monitoring device further developed via Sematech funding and commercialized via spinoff company (Peak Sensor Systems)
- **MTI Micro Fuel Cells – Los Alamos**
  - ATP joint venture for direct-methanol fuel cells; \$4,662K from ATP
  - Parent company (Mechanical Technology) acquired Los Alamos staff and technology

# *ATP Proposal Evaluation Selection Criteria*

- **Scientific and Technological Merit (50%)**
  - ✓ Innovative?
  - ✓ High technical risk but feasible?
  - ✓ High-quality R&D plan?
- **Broad-Based Economic Benefits (50%)**
  - ✓ What are the economic returns?
  - ✓ Good plan for realizing economic returns?
  - ✓ Justification for ATP funding?

# *IP Rights* *under an ATP Award*

- Non-profit and awardee are free to negotiate terms re. consideration, MTAs, licensing of background IP, NDAs, copyrights, etc.
  - Currently, for-profit awardee cannot grant an **exclusive** license **to a non-profit**
- Current statute restricts ownership of patent rights to **for-profit companies**
  - does not apply to **non-patentable IP**
- Government reserves:
  - right to paid-up, royalty-free, non-exclusive license for governmental use
  - “March-in” rights

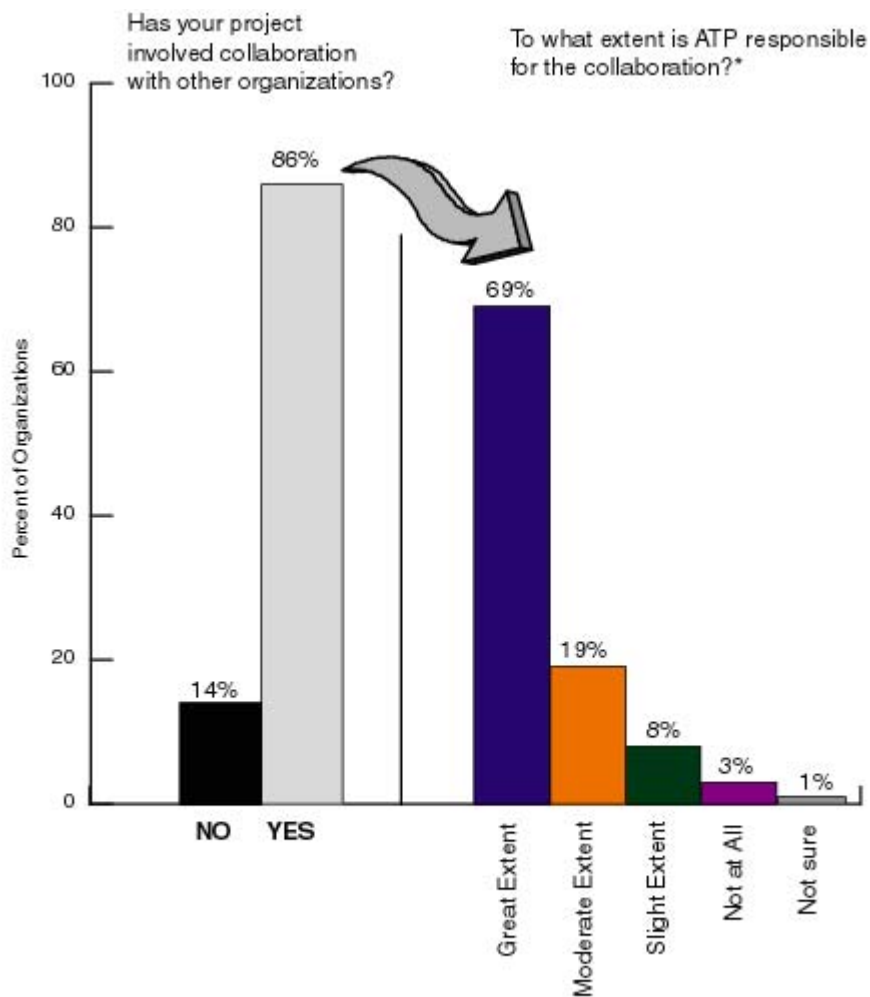


## *Proposed, Statutory Changes*

- Numerous times in the past, NIST & DoC asked Congress to permit any members of an ATP joint venture (including non-profits) to hold title to IP
- New recommendations by Secretary Evans to improve ATP (see ATP's homepage: [www.atp.nist.gov/atp/secy\\_rept/](http://www.atp.nist.gov/atp/secy_rept/) & [www.nist.gov/public\\_affairs/releases/g02-evans\\_atp\\_report.htm](http://www.nist.gov/public_affairs/releases/g02-evans_atp_report.htm))
  - Would allow universities to lead ATP joint ventures
  - Would permit universities and other non-profit members of ATP joint ventures to negotiate for rights in intellectual property resulting from these ventures

- **Special section on non-profit partnerships**
- **Educate non-profit researchers about collaborative R&D**
  - **Savvy partners are more desirable partners**
- **Resource for prospective, industrial partners**
  - **Convince companies to apply**
  - **Refer company partners to ATP information, regulations and forms**
- **Collaboration Bulletin Board**
  - **Post available technology**

# *ATP Stimulates Collaborations*

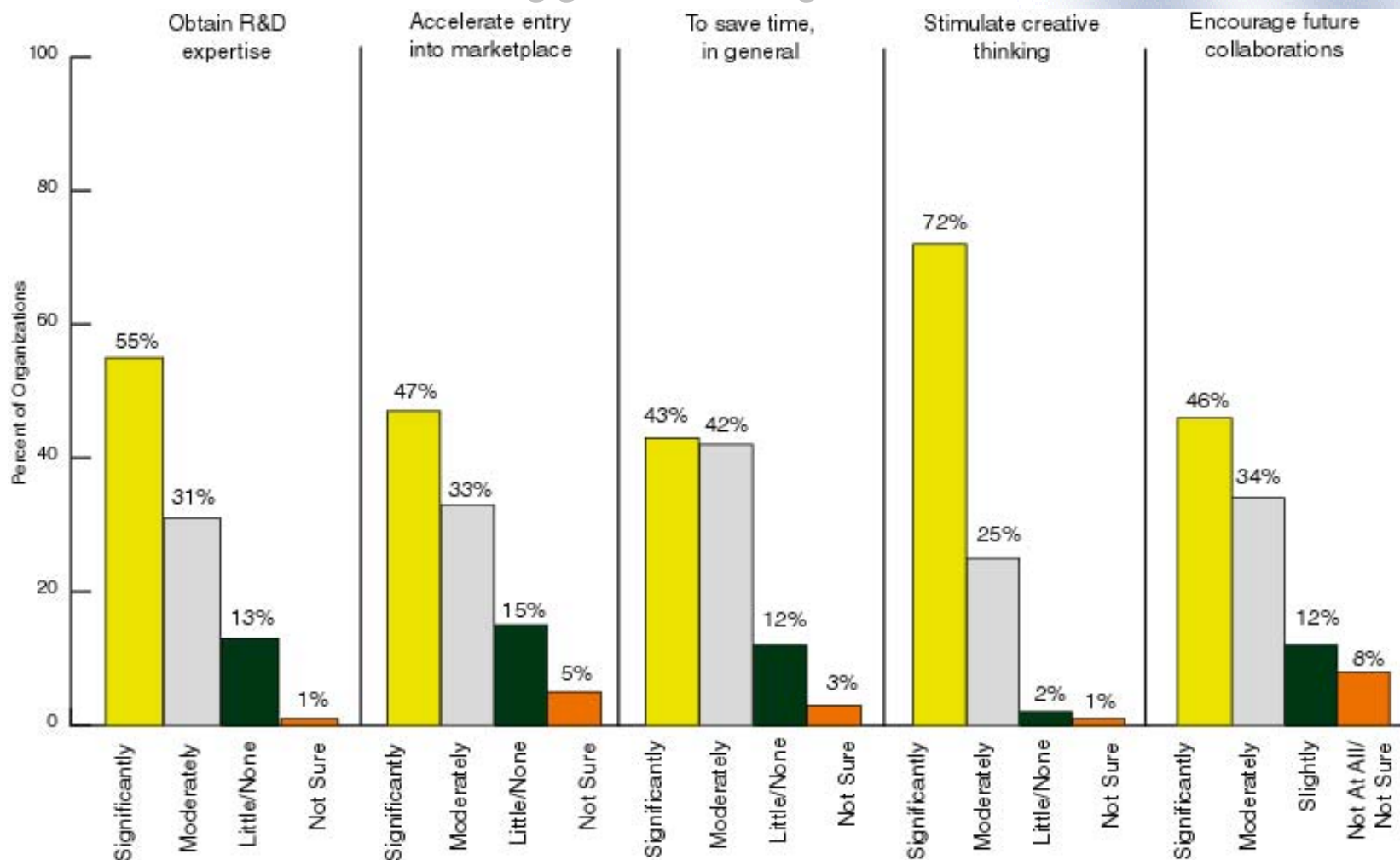


Developing  
Precompetitive  
Technologies is Fertile  
Ground for  
University/Industry/  
Government Partnerships

**Note:** \*Includes responses from organizations indicating "YES" to prior question.

**Source:** Business Progress Reports from 415 organizations in 198 ATP projects funded 1993-1997—after one or more years of ATP funding.

## Effects of Collaboration



**Note:** Includes responses from organizations indicating 'YES' to question--Has your project involved collaboration with other organizations?

**Source:** Business Progress Reports from 415 organizations in 198 ATP projects funded 1993-1997--after one or more years of ATP funding.



# *Information Re. ATP and Proposal-Submission*

## *Browse ATP Information*

**World Wide Web:** [\*www.atp.nist.gov\*](http://www.atp.nist.gov)

## *Get on the ATP Mailing List*

**Call toll-free:**

***800-ATP-FUND  
(800-287-3863)***

**Fax your name and address to:** ***(301) 926-9524***

**Send an e-mail message to:**

***atp@nist.gov***

